



# ***AT-FH708E v2***

*10/100Base Ethernet Hub*

## ***Installation Guide***

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960 Stewart Drive Suite B, Sunnyvale CA USA 94085

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# *Electrical Safety and Emission Statement*

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**Standards:** This product meets the following standards.

## **U.S. Federal Communications Commission**

### **DECLARATION OF CONFORMITY**

Manufacture Name: Allied Telesyn International

Manufacture Address: 960 Stewart Drive, Suite B  
Sunnyvale, CA 94086 USA

Manufacture Telephone: 408-730-0950

Declares that the product: Ethernet hub

Model Number: AT-FH708E V2

This product complies with FCC Part 15, Class B Limits:

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### **RADIATED ENERGY**

Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.

## Industry Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

### RFI Emission

FCC Part 15, EN55022,  
C-Tick, CISPR 22, VCCI  
(Class B) 1



**WARNING:** In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. 2

### Immunity


EN55024 3


### Electrical Safety


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No. 950, EN60950 4


**Important:** Appendix A contains translated safety statements for installing this equipment. When you see the 1, go to Appendix A for the translated safety statement in your language.


**Wichtig:** Anhang A enthält übersetzte Sicherheitshinweise für die Installation dieses Geräts. Wenn Sie 1 sehen, schlagen Sie in Anhang A den übersetzten Sicherheitshinweis in Ihrer Sprache nach.


**Vigtigt:** Tillæg A indeholder oversatte sikkerhedsadvarsler, der vedrører installation af dette udstyr. Når De ser symbolet , skal De slå op i tillæg A og finde de oversatte sikkerhedsadvarsler i Deres eget sprog.


**Belangrijk:** Appendix A bevat vertaalde veiligheidsopmerkingen voor het installeren van deze apparatuur. Wanneer u de  ziet, raadpleeg Appendix A voor vertaalde veiligheidsinstructies in uw taal.


**Important:** L'annexe A contient les instructions de sécurité relatives à l'installation de cet équipement. Lorsque vous voyez le symbole , reportez-vous à l'annexe A pour consulter la traduction de ces instructions dans votre langue.


**Tärkeää:** Liite A sisältää tämän laitteen asentamiseen liittyvät käännetyt turvaohjeet. Kun näet -symbolin, katso käännettyä turvaohjetta liitteestä A.

**Importante:** l'Appendice A contiene avvisi di sicurezza tradotti per l'installazione di questa apparecchiatura. Il simbolo , indica di consultare l'Appendice A per l'avviso di sicurezza nella propria lingua.

**Viktig:** Tillegg A inneholder oversatt sikkerhetsinformasjon for installering av dette utstyret. Når du ser , åpner du til Tillegg A for å finne den oversatte sikkerhetsinformasjonen på ønsket språk.

**Importante:** O Anexo A contém advertências de segurança traduzidas para instalar este equipamento. Quando vir o símbolo , leia a advertência de segurança traduzida no seu idioma no Anexo A.

**Importante:** El Apéndice A contiene mensajes de seguridad traducidos para la instalación de este equipo. Cuando vea el símbolo , vaya al Apéndice A para ver el mensaje de seguridad traducido a su idioma.

**Obs!** Bilaga A innehåller översatta säkerhetsmeddelanden avseende installationen av denna utrustning. När du ser , skall du gå till Bilaga A för att läsa det översatta säkerhetsmeddelandet på ditt språk.



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# *Welcome to Allied Telesyn*

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This guide contains instructions on how to install an Allied Telesyn AT-FH708E V2 Ethernet Hub.

## Where to Find Web-based Guides

The Allied Telesyn web site at **[www.alliedtelesyn.com](http://www.alliedtelesyn.com)** contains the most recent documentation for all Allied Telesyn products. The documentation can be downloaded from the web site in PDF format.

## Document Conventions

This guide uses several conventions that you should become familiar with before you begin to install the product.

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### **Note**

A note provides additional information.

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**Caution**

A caution indicates that performing or omitting a specific action may result in equipment damage or loss of data.

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**Warning**

A warning indicates that performing or omitting a specific action may result in bodily injury.

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## Contacting Allied Telesyn

You can contact Allied Telesyn technical support by telephone, fax, e-mail, or online.

### Online Support

To request technical support online, fill out the Online Technical Support Form at **[www.alliedtelesyn.com/forms/support.htm](http://www.alliedtelesyn.com/forms/support.htm)**.

## Telephone or Fax Support

For technical support via fax, please fill out the “Technical Support Fax Order” on page 35 and send it to the appropriate location listed below.

### Americas

United States, Canada,  
Mexico, Central America,  
South America  
Tel: 1 (800) 428-4835  
Fax: 1 (503) 639-3976

### Germany

Germany, Switzerland,  
Austria, Eastern Europe  
Tel: (+49) 30-435-900-126  
Fax: (+49) 30-435-70-650

### Asia

Singapore, Taiwan, Thailand,  
Malaysia, Indonesia, Korea,  
Philippines, China,  
India, Hong Kong  
Tel: (+65) 3815-612  
Fax: (+65) 3833-830

### Italy

Italy, Spain, Portugal, Greece,  
Turkey, Israel, Middle East,  
Africa  
Tel: (+39) 02-41-30-41  
Fax: (+39) 02-41-30-42-00

### Australia

Australia, New Zealand  
Tel: 1 (800) 000-880  
Fax: (+61) 2-9438-4966

### Japan

Tel: (+81) 3-3443-5640  
Fax: (+81) 3-3443-2443

### France

France, Belgium, Luxembourg,  
The Netherlands  
Tel: (+33) 1-60-92-15-25  
Fax: (+33) 1-69-28-37-49

### United Kingdom

United Kingdom, Denmark,  
Norway, Sweden, Finland,  
Iceland  
Tel: (+44) 1-235-442560  
Fax: (+44) 1-235-442680

## E-mail Support

### **United States and Canada**

TS1@alliedtelesyn.com

### **Latin America, Mexico, Puerto Rico, Caribbean, and Virgin Islands**

latin\_america@alliedtelesyn.com

### **United Kingdom, Sweden, Norway, Denmark, and Finland**

support\_europe@alliedtelesyn.com

## Returning Products

Products for return or repair must first be assigned a Return Materials Authorization (RMA) number. A product sent to Allied Telesyn without a RMA number will be returned to the sender at the sender's expense.

To obtain an RMA number, contact Allied Telesyn's Technical Support at one of the following locations:

#### **North America**

2124 Zanker Road  
San Jose, CA 95131  
Tel: 1-800-428-4835,  
option 4  
Fax: 1-503-639-3716

#### **European Customer Support Centre**

10/11 Bridgemoor Close  
Westmead Industrial Estate  
Swindon, Wiltshire SN5 7YT  
England  
Tel: +44-1793-501401  
Fax: +44-1793-431099

**Latin America, the  
Caribbean,  
Virgin Islands**

Tel: international code +  
425-481-3852

Fax: international code +  
425-483-9458

**Mexico and Puerto Rico**

Tel: 1-800-424-5012, ext 3852

or

1-800-424-4284, ext 3852

Mexico only:

95-800-424-5012, ext 3852

Fax: international code +  
425-489-9191

## FTP Server

If you need a new version of management software for an Allied Telesyn device and you know the file name of the program, you can download the software by connecting directly to our FTP server at **ftp://gateway.centre.com**.

At login, enter 'anonymous'. Enter your e-mail address for the password as requested by the server at login.

## For Sales or Corporate Information

For sales or corporate information, contact Allied Telesyn at one of the following locations:

**Allied Telesyn  
International, Corp.**

19800 North Creek Parkway,  
Suite 200

Bothell, WA 98011

Tel: 1 (425) 487-8880

Fax: 1 (425) 489-9191

**Allied Telesyn  
International, Corp.**

960 Stewart Drive, Suite B  
Sunnyvale, CA 94086

Tel: 1 (800) 424-4284 (USA  
and Canada)

Fax: 1 (408) 736-0100

## Tell Us What You Think

If you have any comments or suggestions on how we might improve this or other Allied Telesyn documents, please fill out the “AT-FH708E V2 Installation Guide Feedback” on page 37 and return the form to us at the address or fax number provided. You can also provide feedback online by filling out the Send Us Feedback Form at

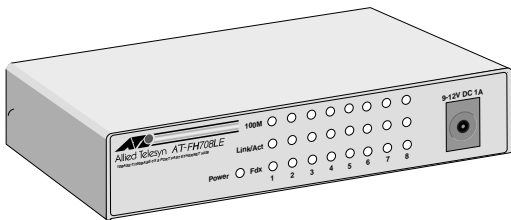
**[www.alliedtelesyn.com/forms/  
feedback.htm](http://www.alliedtelesyn.com/forms/feedback.htm).**

# ***AT-FH708E V2 Fast Ethernet Hub***

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## **Overview**

The AT-FH708E V2 unit is a 10Base-T/100Base-TX Ethernet hub. The unit provides you with a simple, cost-effective solution for Ethernet connectivity between end nodes operating at either 10 or 100 Mbps.



**Figure 1** AT-FH708E V2 Ethernet Hub

## Features

The AT-FH708E V2 Hub has the following features:

- ❑ Eight auto-negotiating 10/100 Mbps twisted pair ports with RJ-45 connectors
- ❑ One Uplink port for connecting the AT-FH708E unit to a switch or hub without a crossover cable
- ❑ IEEE 802.3 and IEEE 802.3u compliant
- ❑ 256K of buffer memory
- ❑ Store-and-forward packet forwarding design
- ❑ Total bandwidth of up to 800 Mbps
- ❑ MAC address table capacity of 8,000 entries
- ❑ IEEE 802.3x flow control in full-duplex operation and backpressure flow control in half-duplex operation
- ❑ System and port status LEDs
- ❑ External power adapter
- ❑ Desktop or wall-mount installation



Figure 2 and Figure 3 show the front and back panels of the hub.

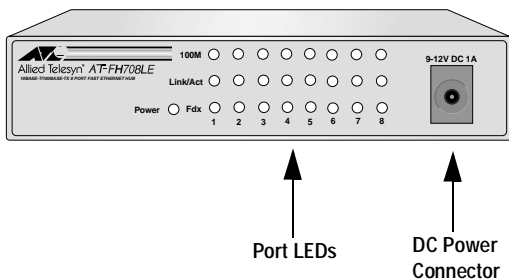


Figure 2 Front Panel

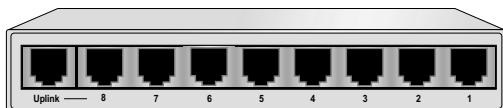


Figure 3 Back Panel

## Physical Description

The physical description for the hub includes:

- ☐ Ports 1 through 7
- ☐ Port 8 and the Uplink port
- ☐ LEDs
- ☐ Power supply

### Ports 1 Through 7

Ports 1 through 7 can operate at either 10 Mbps or 100 speed and in either full- or half-duplex mode. The ports feature RJ-45 connectors and are configured as MDI-X, meaning that you can connect a workstation or server to one of the ports without using a crossover cable. The ports have a maximum operating distance of 100 meters (328 feet) using Category 3, 4, or 5 shielded or unshielded twisted pair cable for 10 Mbps operation and Category 5 cable for 100 Mbps.

The ports are IEEE802.3u Auto-Negotiation compliant. This means that the ports can automatically configure their speed and duplex mode to match the capabilities of the end nodes.

## Port 8 and the Uplink Port

Port 8 and the Uplink port allow you to connect an additional workstation to the unit or interconnect the unit with a switch, hub, or router, without the use of a crossover cable. If you need to connect an additional workstation to the unit, use Port 8, which is configured as MDI-X, just like ports 1 through 7. If you need to connect the unit to an Ethernet switch, hub, or router, use the Uplink port, which is configured as MDI.

Both Port 8 and the Uplink port offer 10 Mbps or 100 Mbps performance and auto-negotiation for both speed and duplex mode, just like ports 1 through 7. Both ports feature an RJ-45 connector and have a maximum operating distance of 100 meters (328 feet) using Category 3, 4, or 5 twisted pair cable for 10 Mbps operation and Category 5 cable for 100 Mbps operation.

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### **Note**

You can use either port 8 or the Uplink port. You cannot use both simultaneously.

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## Front Panel LEDs

Refer to Table 1 for a description of the device LEDs.

**Table 1** LED Functions

LEDs	Color	Description
Power	Green	<b>On</b> means the hub is receiving power. <b>Off</b> means the hub is not receiving power.
100M	Green	<b>On</b> means the port is operating at 100 Mbps.
	Yellow	<b>On</b> means the port is operating at 10 Mbps.
Link/Act	Green	<b>On</b> indicates a valid physical link on the port. <b>Flashing</b> indicates data is being transmitted or received on the port. <b>Off</b> means there is no link on the port.

**Table 1** LED Functions (continued)

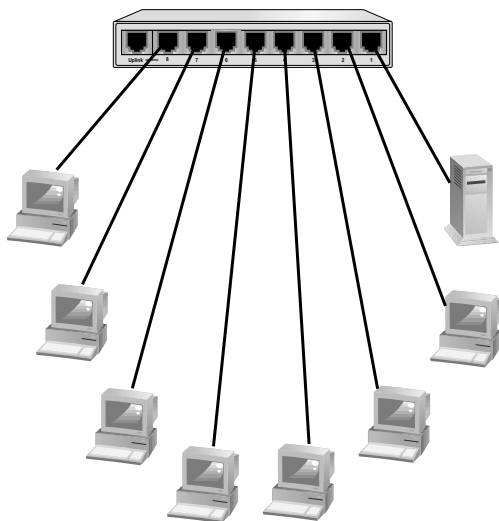
LEDs	Color	Description
Fdx/Hdx	Green	<b>On</b> indicates the port is operating in full-duplex mode.  <b>Off</b> indicates the port is operating in half-duplex mode.

## Power Supply

The AT-FH708E V2 Ethernet Hub uses an external power adapter that comes standard with the unit.

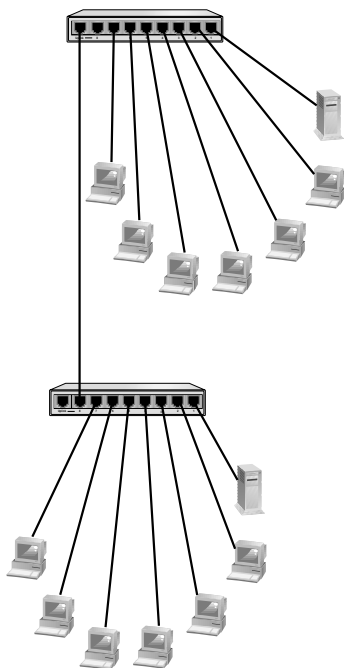
# Network Topologies

Figure 4 illustrates a network that consists of one AT-FH708E V2 Ethernet Hub used to interconnect seven workstations and a server. The Uplink port is not used in this configuration.



**Figure 4** Single AT-FH708E V2 Topology

Figure 5 illustrates a network of two AT-FH705E V2 Ethernet Hubs that have been interconnected using the Uplink port on the top unit. Using the Uplink port eliminates the need for a crossover cable to interconnect the devices.



**Figure 5** Multiple AT-FH708E V2 Ethernet Hub Topology

## Installing the Unit

This section contains the procedures for installing the unit.

### Verifying the Package Contents

Make sure that the package includes the following items. If any item is missing or damaged, contact your Allied Telesyn representative for assistance.

- ☐ One AT-FH708E V2 Ethernet Hub
- ☐ One power adapter
- ☐ Four self-adhesive rubber feet
- ☐ Warranty card
- ☐ This installation guide

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#### **Note**

For wall-mount installation, you must supply the two screws and plastic anchors or other material necessary to physically mount the hub on the wall.

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## Selecting a Site

Be sure to observe the following site requirements:

- ☐ Make sure you are placing the device in a dust-free and moisture-free environment.
- ☐ Do not block the ventilation openings on the unit. Allow at least 10 centimeters (4 inches) of space at the front and back of the unit for ventilation.
- ☐ Make sure that the unit's power is accessible and cables can be connected easily.
- ☐ Cabling should be away from sources of electrical noise such as radios, transmitters, broadband amplifiers, power lines, and fluorescent fixtures.
- ☐ Do not place objects on top of the unit.
- ☐ Use dedicated power circuits or power conditioners to supply power to the unit.

- ❑ Observe the following cabling specifications:

Ports	Connector Type	Type of Cable	Maximum Distance
1 to 8	RJ-45	Category 3, 4, or 5 (10 Mbps) Category 5 (100 Mbps)	100 m (328 ft)
Uplink	RJ-45	Category 3, 4, or 5 (10 Mbps) Category 5 (100 Mbps)	100 m (328 ft)

## Reviewing Safety Guidelines

Please review the following safety guidelines before you begin to install the device.



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### Warning

**Power cord is used as a disconnection device:** To de-energize equipment, disconnect the power cord. 5

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**Caution**

**Pluggable Equipment:** The socket outlet should be installed near the equipment and should be easily accessible. 6

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**Caution**

**Air vents:** The air vents on the unit must not be blocked and must have free access to the room ambient air for cooling. 7

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**Caution**

**Operating Temperature:** This product is designed for a maximum ambient temperature of 40°C. 8

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**Caution**

**All Countries:** Install this product in accordance with local and National Electric Codes. 9

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**Caution**

**EUROPE - EU:** Use TÜV licensed AC adapter of DC 9V, 1A. 10

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**Caution**

**USA/CANADA:** Use a UL Listed/CSA Certified AC adapter of DC 9V, 1A. 11

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## Installing the Unit on a Desktop

To install the hub on a desktop, perform the following procedure. To mount the unit on a wall, perform the steps “Installing the Unit on a Wall” on page 15.

1. Attach the four self-adhesive rubber feet to the bottom of the device, positioning them in the indentations.
2. Place the device on a flat, level surface.
3. Plug the power adapter into a power source and plug the DC power cord into the DC connector on the front panel of the hub.



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### **Warning**

The power cord is used as a disconnection device. To de-energize equipment, disconnect the power cord.

 5

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4. Make sure the Power LED on the front panel lights green.

5. Attach the data cables to the ports on the hub. Do not use crossover cables to connect workstations or servers to ports 1 through 8. Do not use a crossover cable to connect a switch, hub, or router to the Uplink port.

---

**Note**

You can use either port 8 or the Uplink port on an AT-FH708E V2 device. You cannot use both ports simultaneously.

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6. Go to the procedure “Verifying and Troubleshooting the Installation” on page 17.

## Installing the Unit on a Wall

For wall-mount installation, you can position the hub vertically or horizontally on the wall using the keyhole cutouts in the bottom of the hub chassis.

1. If previously attached, remove the rubber feet and all cables and the DC power cord from the hub.
2. Select a wall location for the hub.

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**Note**

For wall-mount installation, you must supply the two screws and plastic anchors or other material necessary to physically mount the hub to the wall.

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3. Install two plastic anchors and two pan-head screws into the wall, separated by 5 centimeters (approximately 2 inches).
4. Position the device onto the wall screws.
5. Plug the power adapter into a power source, and plug the DC power cord into the DC connector on the front panel of the hub.



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**Warning**

The power cord is used as a disconnection device. To de-energize equipment, disconnect the power cord.

 5

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6. Make sure the Power LED on the front panel lights green.

7. Attach the data cables to the hub ports. Do not use crossover cables to connect workstations or servers to ports 1 through 8. Do not use a crossover cable to connect a switch, hub, or router to the Uplink port.

---

**Note**

You can use either port 8 or the Uplink port. You cannot use both ports simultaneously.

---

8. Go to the procedure “Verifying and Troubleshooting the Installation” on page 17.

## Verifying and Troubleshooting the Installation

The following procedure should be performed after you have initially installed the unit to check to be sure that the device is operating properly. You can also perform this procedure to troubleshoot the unit in the event you experience any problems with the device.

1. Check the Power LED. The LED should be ON. If the LED is OFF, check the following:
  - ❑ Verify that the power adapter is securely connected to the power source and to the DC connector on the front of the AT-FH708E V2 unit.

- ☐ Check that the power outlet has power by connecting another device to it.
  - ☐ Try replacing the power adapter with another power adapter.
2. Check the Link/Act LED for each port. The LED should be lit steady or flashing. If a Link/Act LED is OFF, check the following:
- ☐ Verify that the node connected to the port on the hub is powered ON. If the node is OFF, power the unit ON.
  - ☐ Verify that the distance between the hub and the connected network device is no greater than 100 meters (328 feet).
  - ☐ Check to be sure that you are using the correct type of cable: Category 3, 4, or 5 for 10 Mbps operation and Category 5 cable for 100 Mbps operation.
  - ☐ Verify that the cable has not been cut or damaged.
3. If the Lnk/Act LED for a port is ON but there is a communication problem to the end node connected to the port, such as the loss of data, check the following:
- ☐ Check to be sure that the distance between the hub and the connected network device is no greater than 100 meters (328 feet).



- ❑ Verify that you are using the correct type of cable: Category 3, 4, or 5 for 10 Mbps operation and Category 5 cable for 100 Mbps operation.

## Warranty Registration

When you have finished installing the unit, you should register your product by completing the enclosed warranty card and sending it in, or by visiting our web site at **[www.alliedtelesyn.com/forms/warranty.htm](http://www.alliedtelesyn.com/forms/warranty.htm)** and completing the on-line registration.

## Technical Specifications

Standards Compatibility:	IEEE 802.3, IEEE802.3u
Power Supply:	Input: 9V @ 1A
Connectors:	RJ-45
Address Table:	8,000 entries total
Queue Buffer:	256K bytes

Flow Control:	Full-duplex: Disable IEEE 803.3u Half-duplex: Enable backpressure
Physical Dimensions:	W x D x H 146 x 82 x 26 mm (5.75 x 3.23 x 1.02 in.)
Environment Specifications:	
Operating Temperature	0° to 40° C
Storage Temperature	-25° to 70° C
Operating Humidity	5% to 90% Relative Humidity
Storage Humidity	10% to 95% Relative Humidity
Electromagnetic Emission:	FCC Part 15, EN55022, C-Tick, CISPR 22, VCCI (Class B)
Certification:	CE Mark
Immunity:	EN55024
Safety:	UL 1950, CSA C22.2 No. 950, EN60950

## *Appendix A*

# *Translated Safety and Emission Information*

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**Important:** This appendix contains multiple-language translations for the safety statements in this guide.

**Wichtig:** Dieser Anhang enthält Übersetzungen der in diesem Handbuch enthaltenen Sicherheitshinweise in mehreren Sprachen.

**Vigtigt:** Dette tillæg indeholder oversættelser i flere sprog af sikkerhedsadvarslerne i denne håndbog.

**Belangrijk:** Deze appendix bevat vertalingen in meerdere talen van de veiligheidsopmerkingen in deze gids.

**Important:** Cette annexe contient la traduction en plusieurs langues des instructions de sécurité figurant dans ce guide.

**Tärkeää:** Tämä liite sisältää tässä oppaassa esiintyvät turvaohjeet usealla kielellä.

**Importante:** questa appendice contiene traduzioni in più lingue degli avvisi di sicurezza di questa guida.

**Viktig:** Dette tillegget inneholder oversettelser til flere språk av sikkerhetsinformasjonen i denne veiledningen.

**Importante:** Este anexo contém traduções em vários idiomas das advertências de segurança neste guia.

**Importante:** Este apéndice contiene traducciones en múltiples idiomas de los mensajes de seguridad incluidos en esta guía.

**Obs!** Denna bilaga innehåller flerspråkiga översättningar av säkerhetsmeddelandena i denna handledning.

**Standards:** This product meets the following standards:

### **U.S. Federal Communications Commission**

#### **DECLARATION OF CONFORMITY**

Manufacture Name: Allied Telesyn International

Manufacture Address: 950 Stewart Drive, Suite B  
Sunnyvale, CA 94085 USA

Manufacture Telephone: 408-730-0950

Declares that the product: Ethernet hub

Model Number: AT-FH708E V2

This product complies with FCC Part 15, Class B Limits:

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **RADIATED ENERGY**

Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:


- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes and modifications not expressly approved by the manufacturer or registrant of this equipment can void your authority to operate this equipment under Federal Communications Commission rules.







## Industry Canada


This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.


- 1 **RFI Emissions** FCC Part 15,  
EN55022, C-Tick,  
CISPR 22, VCCI  
(Class B)
- 2  **WARNING:** In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
- 3 **Immunity** EN55024
- 4 **Electrical Safety** UL 1950, CSA C22.2  
No. 950, EN60950

### SAFETY







- 5  **CAUTION:** POWER CORD IS USED AS A DISCONNECTION DEVICE. TO DE-ENERGIZE EQUIPMENT, disconnect the power cord.
- 6  **PLUGGABLE EQUIPMENT,** the socket outlet shall be installed near the equipment and shall be easily accessible.
- 7  **CAUTION:** Air vents must not be blocked and must have free access to the room ambient air for cooling.
- 8  **OPERATING TEMPERATURE:** This product is designed for a maximum ambient temperature of 40° degrees C.
- 9  **ALL COUNTRIES:** Install product in accordance with local and National Electrical Codes.
- 10  **EUROPE - EU:** Use TÜV licensed AC adapter of DC 7.5V, 1A.

- 11  **USA/CANADA:** Use a UL Listed/CSA Certified AC adapter of DC 9V, 1A.

**Normen:** Dieses Produkt erfüllt die Anforderungen der nachfolgenden Normen.


- 1 Hochfrequenzstörung FCC Part 15, EN55022, C-Tick, CISPR 22, VCCI (Class B)
- 2  **WARNUNG:** Bei Verwendung zu Hause kann dieses Produkt Funkstörungen hervorrufen. In diesem Fall müßte der Anwender angemessene Gegenmaßnahmen ergreifen.
- 3 Störsicherheit EN55024
- 4 Elektrische Sicherheit UL 1950, CSA C22.2 No. 950, EN60950

## SICHERHEIT







- 5  **VORSICHT:** DAS NETZKABEL DIENT ZUM TRENNEN DER STROMVERSORGUNG. ZUR TRENNUNG VOM NETZ, KABEL AUS DER STECKDOSE ZIEHEN.
- 6  **STECKBARES GERÄT:** Die Anschlußbuchse sollte in der Nähe der Einrichtung angebracht werden und leicht zugänglich sein."
- 7  **VORSICHT**  
Die Entlüftungsöffnungen dürfen nicht versperrt sein und müssen zum Kühlen freien Zugang zur Raumluft haben.
- 8  **BETRIEBSTEMPERATUR:** Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 40° C entworfen.
- 9  **ALLE LÄNDER:** Installation muß örtlichen und nationalen elektrischen Vorschriften entsprechen.
- 10  Gebrauchen Sie einen von TÜV zugelassenen Wechselstromadapter für Gleichstrom 9 V, 1A.

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**Standarder:** Dette produkt tilfredsstiller de følgende standarder.






- 1 Radiofrekvens  
forstyrrelsesemission: FCC Part 15,  
EN55022, C-Tick,  
CISPR 22, VCCI  
(Class B)
- 2  **ADVARSEL:** I et hjemligt miljø kunne dette produkt forårsage radio forstyrrelse. Bliver det tilfældet, påkræves brugeren muligvis at tage tilstrækkelige foranstaltninger.
- 3 Immunitet EN55024
- 4 Elektrisk sikkerhed UL 1950, CSA C22.2  
No. 950, EN60950

## SIKKERHED













- 5  **ADVARSEL: DEN STRØMFØRENDE LEDNING BRUGES TIL AT AFBRYDE STRØMMEN. SKAL STRØMMEN TIL APPARATET AFBRYDES,** tages ledningen ud af stikket.
- 6  **UDSTYR TIL STIKKONTAKT,** stikkontakten bør installeres nær ved udstyret og skal være lettilgængelig.
- 7  **ADVARSEL:** Ventilationsåbninger må ikke blokeres og skal have fri adgang til den omgivende luft i rummet for afkøling.
- 8  **BETJENINGSTEMPERATUR:** Dette apparat er konstrueret til en omgivende temperatur på maksimum 40 grader C.
- 9  **ALLE LANDE:** Installation af produktet skal ske i overensstemmelse med lokal og national lovgivning for elektriske installationer.
- 10  Brug kun TÜV godkendt vekselstrømstransformator på 9 V jævnstrøm, 1A.



**Eisen:** Dit product voldoet aan de volgende eisen.








-  **1**      RFI Emissie                      FCC Part 15, EN55022,  
C-Tick, CISPR 22, VCCI  
(Class B)
  
-  **2**       **WAARSCHUWING:** Binnenshuis kan dit  
product radiostoring veroorzaken, in welk geval  
de gebruiker verplicht kan worden om gepaste  
maatregelen te nemen.
  
-  **3**      Immuniteit                      EN55024
  
-  **4**      Electrische Veiligheid      UL 1950, CSA C22.2 No.  
950, EN60950

## VEILIGHEID


-  **5**       **WAARSCHUWING: HET TOESTEL WORDT  
UITGESCHAKELD DOOR DE STROOMKABEL  
TE ONTKOPPELEN. OM HET TOESTEL  
STROOMLOOS TE MAKEN: de stroomkabel  
ontkoppelen.**
  
-  **6**       **AAN TE SLUITEN APPARATUUR,** de  
contactdoos wordt in de nabijheid van de  
apparatuur geïnstalleerd en is gemakkelijk te  
bereiken."
  
-  **7**       **OPGELET:** De ventilatiegaten mogen niet  
worden gesperd en moeten de omgevingslucht  
ongehinderd toelaten voor afkoeling.
  
-  **8**       **BEDRIJFSTEMPERATUUR:** De  
omgevingstemperatuur voor dit produkt mag niet  
meer bedragen dan 40 graden Celsius.
  
-  **9**       **ALLE LANDEN:** het toestel installeren  
overeenkomstig de lokale en nationale elektrische  
voorschriften.
  
-  **10**       **Gebruik een door TÜV gekeurde  
wisselstroomadapter van 9 Volt gelijkstroom, 1  
ampères.**

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**Normes:** ce produit est conforme aux normes de suivantes.

- 🌀 1 Emission d'interférences radioélectriques      FCC Part 15,  
EN55022, C-Tick,  
CISPR 22, VCCI  
(Class B)
  
- 🌀 2  **MISE EN GARDE :** dans un environnement domestique, ce produit peut provoquer des interférences radioélectriques. Auquel cas, l'utilisateur devra prendre les mesures adéquates.
  
- 🌀 3 Immunité      EN55024
  
- 🌀 4 Sécurité électrique      UL 1950, CSA C22.2  
No. 950, EN60950
  
- 🌀 5  **DANGER DE FOUDRE**  
**DANGER:** NE PAS MANIER le matériel ou les CÂBLES lors d'activité orageuse.
  
- 🌀 6  **EQUIPEMENT POUR BRANCHEMENT ELECTRIQUE,** la prise de sortie doit être placée près de l'équipement et facilement accessible".
  
- 🌀 7  **ATTENTION:** Ne pas bloquer les fentes d'aération, ceci empêcherait l'air ambiant de circuler librement pour le refroidissement.
  
- 🌀 8  **TEMPÉRATURE DE FONCTIONNEMENT:**  
Ce matériel est capable de tolérer une température ambiante maximum de ou 40 degrés Celsius.
  
- 🌀 9  **POUR TOUS PAYS:** Installer le matériel conformément aux normes électriques nationales et locales.
  
- 🌀 10  Utiliser un adaptateur secteur conforme TÜV de 9 V, 1 A en courant continu.

**Standardit:** Tämä tuote on seuraavien standardien mukainen.


- |     |   |   |
|-----|---|---|
| 🌀 1 | Radioaaltojen häirintä  | FCC Part 15,<br>EN55022, C-Tick,<br>CISPR 22, VCCI<br>(Class B) |
| 🌀 2 |  VAROITUS: Kotiolosuhteissa tämä laite voi aiheuttaa radioaaltojen häirityä, missä tapauksessa laitteen käyttäjän on mahdollisesti ryhdyttävä tarpeellisiin toimenpiteisiin. |   |
| 🌀 3 | Kestävyys   | EN55024   |
| 🌀 4 | Sähköturvallisuus   | UL 1950, CSA C22.2<br>No. 950, EN60950                          |

## TURVALLISUUS

- |      |   |
|------|---|
| 🌀 5  |  <b>HUOMAUTUS:</b> VIRTajohtoa KÄYTETÄÄN VIRRANKATKAISULAITTEENA. VIRTAKATKAISTAAN irrottamalla virtajohto.                                  |
| 🌀 6  |  PISTORASIAAN KYTKETTÄVÄ LAITE; pistorasia on asennettava laitteen lähelle ja siihen on oltava esteetön pääsy."                              |
| 🌀 7  |  <b>HUOMAUTUS:</b> Ilmavaihtoreikiä ei pidä tukkia ja niillä täytyy olla vapaa yhteys ympäröivään huoneilmaan, jotta ilmanvaihto tapahtuisi. |
| 🌀 8  |  <b>KÄYTTÖLÄMPÖTILA:</b> Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 40°C.   |
| 🌀 9  |  <b>KAIKKI MAAT:</b> Asenna tuote paikallisten ja kansallisten sähköturvallisuusmääräysten mukaisesti.                                     |
| 🌀 10 |  Käytä TÜV-lisenssillä valmistettua verkkosovitinta, jonka tasajännitteen nimellisarvot ovat DC 9 V, 1 A (ampeeria).                       |

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**Standard:** Questo prodotto è conforme ai seguenti standard.

- 1 Emissione RFI (interferenza di radiofrequenza) FCC Part 15, EN55022, C-Tick, CISPR 22, VCCI (Class B)
- 2  **AVVERTENZA:** in ambiente domestico questo prodotto potrebbe causare radio interferenza. In questo caso potrebbe richiedersi all'utente di prendere gli adeguati provvedimenti.
- 3 Immunità EN55024
- 4 Sicurezza elettrica UL 1950, CSA C22.2 No. 950, EN60950

## NORME DI SICUREZZA

- 5  **ATTENZIONE:** IL CAVO DI ALIMENTAZIONE È USATO COME DISPOSITIVO DI DISATTIVAZIONE. PER TOGLIERE LA CORRENTE AL DISPOSITIVO staccare il cavo di alimentazione.
- 6  **APPARECCHIATURA COLLEGABILE**, la presa va installata vicino all'apparecchio per risultare facilmente accessibile".
- 7  **ATTENZIONE:** le prese d'aria non vanno ostruite e devono consentire il libero ricircolo dell'aria ambiente per il raffreddamento.
- 8  **TEMPERATURA DI FUNZIONAMENTO:** Questo prodotto è concepito per una temperatura ambientale massima di 40 gradi centigradi.
- 9  **TUTTI I PAESI:** installare il prodotto in conformità delle vigenti normative elettriche nazionali.
- 10  Utilizzare l'adattatore per c.a. da 9 V c.c. e 1 A conforme alla normativa TÜV.

**Sikkerhetsnormer:** Dette produktet tilfredsstiller følgende sikkerhetsnormer.


- |     |   |   |
|-----|---|---|
| ✍ 1 | RFI stråling  | FCC Part 15,<br>EN55022, C-Tick,<br>CISPR 22, VCCI<br>(Class B) |
| ✍ 2 |  <b>ADVARSEL:</b> Hvis dette produktet benyttes til privat bruk, kan produktet forårsake radioforstyrrelse. Hvis dette skjer, må brukeren ta de nødvendige forholdsregler. |   |
| ✍ 3 | Immunitet   | EN55024   |
| ✍ 4 | Elektrisk sikkerhet   | UL 1950, CSA C22.2<br>No. 950, EN60950                          |

## SIKKERHET







- |      |   |  |
|------|---|--|
| ✍ 5  |  <b>FORSIKTIG: STRØMLEDNINGEN BRUKES TIL Å FRAKOBLE UTSTYRET. FOR Å DEAKTIVISERE UTSTYRET, må strømforsyningen kobles fra.</b> |  |
| ✍ 6  |  <b>UTSTYR FOR STIKKONTAKT.</b> Stikkontakten skal monteres i nærheten av utstyret og skal være lett tilgjengelig."            |  |
| ✍ 7  |  <b>FORSIKTIG:</b> Lufteventilene må ikke blokkeres, og må ha fri tilgang til luft med romtemperatur for avkjøling.            |  |
| ✍ 8  |  <b>DRIFTSTEMPERATUR:</b> Dette produktet er konstruert for bruk i maksimum romtemperatur på 40 grader celsius.               |  |
| ✍ 9  |  <b>ALLE LAND:</b> Produktet må installeres i samsvar med de lokale og nasjonale elektriske koder.                           |  |
| ✍ 10 |  <b>Benytt TÜV-godkjent AC-adapter på 9V DC, 1A (milliampere).</b>   |  |

---


**Padrões:** Este produto atende aos seguintes padrões.

- 1 Emissão de interferência de radiofrequência FCC Part 15, EN55022, C-Tick, CISPR 22, VCCI (Class B)
- 2  **AVISO:** Num ambiente doméstico este produto pode causar interferência na radiorrecepção e, neste caso, pode ser necessário que o utente tome as medidas adequadas.
- 3 Imunidade EN55024
- 4 Segurança Eléctrica UL 1950, CSA C22.2 No. 950, EN60950







## SEGURANÇA

- 5  **CUIDADO:** O CABO DE ALIMENTAÇÃO É UTILIZADO COMO UM DISPOSITIVO DE DESCONEXÃO. PARA DESELETRIFICAR O EQUIPAMENTO, desconecte o cabo de ALIMENTAÇÃO.
- 6  **EQUIPAMENTO DE LIGAÇÃO,** a tomada eléctrica deve estar instalada perto do equipamento e ser de fácil acesso."
- 7  **CUIDADO:** As aberturas de ventilação não devem ser bloqueadas e devem ter acesso livre ao ar ambiente para arrefecimento adequado do aparelho.
- 8  **TEMPERATURA DE FUNCIONAMENTO:** Este produto foi projetado para uma temperatura ambiente máxima de 40 graus centígrados.
- 9  **TODOS OS PAÍSES:** Instale o produto de acordo com as normas nacionais e locais para instalações eléctricas.
- 10  Use um adaptador de corrente alternada com saída DC de 9V e 1A em conformidade com as especificações da TÜV.

**Estándares:** Este producto cumple con los siguientes estándares.


- |   |   |   |
|---|---|---|
| 1 | Emisión RFI   | FCC Part 15,<br>EN55022, C-Tick,<br>CISPR 22, VCCI<br>(Class B) |
| 2 |  <b>ADVERTENCIA:</b> en un entorno doméstico, este producto puede causar radiointerferencias, en cuyo caso, puede requerirse del usuario que tome las medidas que sean convenientes al respecto. |   |
| 3 | Inmunidad   | EN55024   |
| 4 | Seguridad eléctrica   | UL 1950, CSA C22.2<br>No. 950, EN60950                          |

## SEGURIDAD

- 5  **ATENCIÓN:** EL CABLE DE ALIMENTACION SE USA COMO UN DISPOSITIVO DE DESCONEXION. PARA DESACTIVAR EL EQUIPO, desconecte el cable de alimentación.
- 6  EQUIPO CONECTABLE, el tomacorriente se debe instalar cerca del equipo, en un lugar con acceso fácil".
- 7  **ATENCIÓN:** Las aberturas para ventilación no deberán bloquearse y deberán tener acceso libre al aire ambiental de la sala para su enfriamiento.
- 8  **TEMPERATURA REQUERIDA PARA LA OPERACIÓN:** Este producto está diseñado para una temperatura ambiental máxima de 40 grados C.
- 9  **PARA TODOS LOS PAÍSES:** Monte el producto de acuerdo con los Códigos Eléctricos locales y nacionales.
- 10  Utilizar un adaptador de corriente alterna autorizado TÜV de 9 voltios de corriente continua y 1 amperios.

---

**Standarder:** Denna produkt uppfyller följande standarder.

- ☞ 1 Radiostörning FCC Part 15,  
EN55022, C-Tick,  
CISPR 22, VCCI  
(Class B)
- ☞ 2  **WARNING:** Denna produkt kan ge upphov till radiostörningar i hemmet, vilket kan tvinga användaren till att vidtaga erforderliga åtgärder.
- ☞ 3 Immunitet EN55024
- ☞ 4 Elsäkerhet UL 1950, CSA C22.2  
No. 950, EN60950

### SÄKERHET

- ☞ 5  **WARNING: NÄTKABELN ANVÄNDS SOM STRÖMBRYTARE FÖR ATT KOPPLA FRÅN STRÖMMEN,** dra ur nätkabeln.
- ☞ 6  **UTRUSTNING MED PLUGG.** Uttaget skall installeras i utrustningens närhet och vara lättåtkomligt".
- ☞ 7  **WARNING:** Luftventilerna får ej blockeras och måste ha fri tillgång till omgivande rumsluft för avsvälning.
- ☞ 8  **DRIFTSTEMPERATUR:** Denna produkt är konstruerad för rumstemperatur ej överstigande 40 grader Celsius.
- ☞ 9  **ALLA LÄNDER:** Installera produkten i enlighet med lokala och statliga bestämmelser för elektrisk utrustning.
- ☞ 10  Använd en växelströmsanslutningsenhet licensierad av TÜV. Likström 9V, 1A.



## ***Appendix B***

# ***Technical Support Fax Order***

---

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_

Zip/Postal Code \_\_\_\_\_

Country \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

### **Incident Summary**

Model number of Allied Telesyn product  
I am using \_\_\_\_\_

Firmware release number of Allied Telesyn  
product \_\_\_\_\_

Other network software products I am using  
(e.g., network managers) \_\_\_\_\_

\_\_\_\_\_

Brief summary of problem \_\_\_\_\_  
\_\_\_\_\_

Conditions (List the steps that led up  
to the problem. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Detailed description (Please use separate sheet)

Please also fax printouts of relevant files such as  
batch files and configuration files. When  
completed, fax this sheet to the appropriate  
Allied Telesyn office. Fax numbers can be found  
on page x.

## *Appendix C*

# *AT-FH708E v2 Installation Guide Feedback*

---

Please tell us what additional information you would like to see discussed in this guide. You can fax or mail this form to the mailing address and fax number at the bottom of the page.

I found the following the most valuable \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I would like the following more developed \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I would find this guide more useful if \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Allied Telesyn International, Corp.**  
c/o Technical Communications  
960 Stewart Drive, Suite B  
Sunnyvale, CA 94085 USA

PN 613-50182-00 Rev A